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**Concise review: stem cell therapy for muscular dystrophies.**

<b>Journal:</b>	Stem Cells Transl Med
<b>Publication Year:</b>	2012
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<b>PubMed link:</b>	23197695
<b>Funding Grants:</b>	Modeling Myocardial Therapy with Human Embryonic Stem Cells, Phenotypic Analysis of Human ES Cell-Derived Muscle Stem Cells

**Public Summary:**

Muscular dystrophy comprises a group of genetic diseases that cause progressive weakness and degeneration of skeletal muscle resulting from defective proteins critical to muscle structure and function. This leads to premature exhaustion of the muscle stem cell pool that maintains muscle integrity during normal use and exercise. Stem cell therapy holds promise as a treatment for muscular dystrophy by providing cells that can both deliver functional muscle proteins and replenish the stem cell pool. Here, we review the current state of research on myogenic stem cells and identify the important challenges that must be addressed as stem cell therapy is brought to the clinic.

**Scientific Abstract:**

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